PACIFIC NORTHWEST CHAPTER
FRIENDS OF MINERALOGY

JULY 2011

PNWFM NEWSLETTER

Inside this issue:

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Photo by John Lindell

It's time for the annual PNW Friends of Mineralogy Washington Pass Cleanup and Campout. This collecting trip is the highlight field trip of the year for many members. It is a great opportunity to explore Washington Pass and search for rare minerals with some of the most knowledgeable collectors in this area.

Members will gather at Klipchuck Campground near mile post 174 about 8 miles east of Washington Pass on Friday evening August 12th. Camp sites have been set aside for the group by the Forest Service. If you plan on attending please let Wes Gannaway at debnwes@comcast.net know so that there is ample space provided. Friday night is camp set up, happy hour, and after dark collecting at the "rockslide" road cut looking for Zektzerite with UV lamps. Bring a portable lamp if you have one.

Saturday morning is set aside to work for a couple hours on a project assigned by the Forest Service. This is usually road debris cleanup, brush clearing, campground maintenance or something similar. The afternoon is free for collecting and usually small groups scatter to various collecting areas. There is still quite a bit of snow at higher elevations which may or may not limit collecting in the upper basins. Saturday evening will feature a pot luck dinner back at the campground, socializing, and a return to the "rockslide" for UV collecting.

Sunday is back to the slopes for more field collecting, pack up, and the scenic drive home.

Bring camping gear, collecting gear, food and drink, camera, UV light, loupe, sunscreen, bug repellent, and your best bullshit collecting yarns and join in the adventure.


Photo by Linda Smith


Photo by Linda Smith


Photo by Frank De Wit

PRESIDENT'S MESSAGE - Bob Meyer

Greetings, fellow mineral enthusiasts. We're at the beginning of that time we wait for in the Pacific Northwest, the summer when we can potentially get out and collect, although we might still possibly encounter snowstorms in the mountains, even in July and August. Best wishes to you and best of luck in whatever type of collecting you have planned during this summer.

One potential chance to collect minerals will be at our annual Washington Pass Clean-up, which will be held this year during the weekend of August 12-14. In truth, no one can tell what might be in store for us this year. Due to a long winter and our lack of a spring, Highway 20 had its second latest opening this year since the highway opened in 1973. Thus, unless we start getting warm weather, there still could be snow covering our normal collecting areas.

We had a business meeting in conjunction with Seattle Mineral Market #4 on May 21, (see the article elsewhere in this issue) and some of items of interest arose. We agreed to go forward with signing contracts with the Red Lion Hotel in Kelso through the years of 2012-2014. The contracts are now signed and we are committed. In return for signing for three years, the hotel is providing us with an additional small meeting room, which we can use for ancillary activities and additional events. This year, we will use the extra meeting room to house a number of displays of fluorescent minerals. PNWFM member Don Newsome is coordinating that effort along with our display chairperson, Ray Lasmanis, so please contact either or both of them if you have questions about the fluorescent displays or would like to put in a display case of fluorescent minerals.

We had also discussed the possibility of going back to having a couple of contests in conjunction with the symposium, namely the best self-collected specimen contest and the mineral ID contest. Keep the first contest in mind as you are out collecting this summer, and keep the second in mind as you study your mineral books or peruse mineral sites such as Mindat on the Internet. PNWFM is also open to adding back other programs, such as a micro mineral workshop at the symposium, but ask that a member spearhead any such additional program. PNWFM is willing to support any special activity that is desired by our members, such as the fluorescent mineral displays, so long as someone will help to put the program together, and so that ultimately our investment is proven to be warranted. Please let me or someone on the symposium committee know if you are interested in facilitating such an activity.

We have badges. If you are a member who never received an FM badge and would like one, we have obtained a number of them, and they will be available at the symposium. I would like to express my thanks to Jim Etzwiler for obtaining the badges.

Speaking of the symposium, it is closer than you think. It is not too early to have made your reservations with the Red Lion hotel, to be considering your mineral display, and to start thinking about potential donations to our benefit

BUSINESS MEETING MINUTES, MAY 2011

Business Meeting Minutes May 21, 2011

President, Bob Meyer, called the meeting to order. There were 21 members present. MSP to approve minutes from 10/17/10 business meeting at the symposium. Treasurer's report provided by Linda Smith, via Bill Dameron.

2011 Show Report: The symposium is shaping up to be another fine event. Speaker Chair, Allan Young, has 3 fabulous speakers lined up to talk about classic mineral localities of Mexico. A 2012 through 2014 contract was offered by the Red Lion with the addition of an extra room if we commit to 3 years. MSP to accept 2012-2014 contracts with the Red Lion. Ray Lasmanis has arranged for us to use the cases from the Longview Club. Cost is uncertain at this time. Al Liebetrau, dealers and publicity chair, has flyers available for members to pass out. You can get them from the website. He has 3 floor dealers signed on, but needs another. He will contact several publications with information about the symposium. Christina Morissey volunteered to place ads on Craig's list and face book. There was much discussion about what to do with the extra room. One concern was security. Bob Meyer will check on the security of the room, and whether there are black out curtains in the room, and then he will communicate with Don Newsome and Al about a possible fluorescent display. A reminder that the 2012 show theme is sulfates.

ABC Mineral Educational Program: Lorna needs help. She has 20 flats of minerals that need to be sorted through. Both Wes Gannaway and Linda Smith volunteered to meet Lorna at her place. There was a discussion of how to get more visibility to our ABC Program. One idea was to be present at schools science fairs. Another suggestion was to contact libraries and home school groups.

Jim Etzwiler had new badges for members. MSP for members to receive a badge with no charge. Wes will have a variety of shirts available at the symposium. He has been looking at getting hats but the company he was dealing with is becoming difficult. Suggestions were given for other companies to contact.

Wes reported that everything is a go for the August 12 – 14, WA Pass Clean Up Campout. Friday night there will be a happy hour at camp! Saturday morning is designated for working. Both Friday and Saturday nights members will go up with the lights to look for zektzerite. Saturday night will be a pot luck dinner for all. Bring repellant and cortisone crème for the nasty bugs. Klipchuck Campground is near mp174 about 8 miles from the summit.

National FM Report: The Rochester club won the Carnegie Award. Maybe our club should make it a goal to win this award.

Newsletter: John Lindell would appreciate more articles, field trip reports, and, of course, photos.

New Business: We will be electing officers at the symposium. Is it your turn to volunteer? Think about it. We need a full slate to run and so far we are short.

Good of the Order: Bob Boggs was recognized for his famous exploits at WA Pass.

Meeting adjourned.

Secretary,

Karen Hinderman

TREASURER'S REPORT AS OF MAY 2011

Below is a treasurer's report prepared by PNWFM Treasurer, Bill Dameron for the May business meeting. This is the time of year when the club has the most money, so don't get too excited. The fiscal year ended June 30th. Current dues are best paid with Symposium registration in Sept/Oct. or at any time directly to Bill.

Pacific Northwest Chapter, Friends of Mineralogy

Income/Expenses and running bank balance, Fiscal Year **7/1/2010-6/30/2011** as of 07/21/11

BEGINNING BALANCE (except as noted)		**13,187.62**				
INCOME			EXPENSES			
DUES PAID IN FY 2011	various	1,530.00	TOTAL 2011 DUES SENT NATIONAL		612.00	
SYMPOSIUM Oct '09- Income (see ledger)			SYMPOSIUM Oct '10, expenses (see ledger)			
Registration	various	5,205.00	Two ballrooms, service, bed, taxes		2,037.14	
Shirt, Mag, Bag Sales	various	378.00	Dinner+bar service+service+tax		2,267.44	
Room Dealer	various	240.00	Lunches (taxes incl, roughly)		1333.34	
Floor Dealer	various	1,000.00	Coffee (tax absorbed elsewhere)		137.51	
Banquet-Extra	various	252.00	A/V (tax absorbed elsewhere)		180.11	
Lunch		885.00	Sub-Total, Red Lion		5,955.54	
Auction total		2,592.25	R&M, MR Costs for resale		64.00	
TOTAL		10,552.25	Symposium Cash short/long			
			Symposium 10 Speaker Expenses		2,484.79	
			Symposium 10 other (see ledger)			
			Registration forms & mailing		89.55	
			Insurance		289.00	
			Supplies, signs, stamps, forms		35.78	
			Case expenses		121.35	
			Publicity		-	
			Awards		68.44	
			TOTAL		3,088.91	
Rollover credit - '07 Red Lion Deposit		500.00	Deposit '10 Red Lion rollover from '09		500.00	
			NEWSLETTERS, TEE SHIRTS			
			Production & (minimal) postage	various		
MISC. INCOME, CREDITS			POLO OR TEE SHIRTS	various	840.33	
			TOTAL		840.33	
Gift Harvey		25.00	MISC. EXPENSES, DEBITS			
Gift Ouderkirk		15.00	Oregon non-profit fee	07/22/10	50.00	
			Webpage Hosting	10/15/10	119.40	
			ABC expenses	10/03/10	60.95	
TOTAL		40.00	TOTAL		230.35	
			Group Member Rice FY 2011		500.00	
			Oregon non-profit, papers, etc			
TOTAL INCOME		12,622.25	TOTAL EXPENSES		11,791.13	
RUNNING/ENDING BALANCE		**14,018.74**				
Less Cash on hand for symposium		-				
BALANCE IF CASH ON HAND		14,018.74	(same as bank balance: Bank of Clark County)			
Number of FY 2011 paid members	102		Note: 2011 dues owed to Nationa	(0.00)		
Number of FY 2010 paid members	110	final				

RUDY TSCHERNICH RETIRES FROM THE RICE MUSEUM

The Rice Northwest Museum of Rocks and Minerals held a retirement party for Curator Rudy Tschernich on Saturday, April 30th. Approximately 150 friends and associates attended and enjoyed cake, coffee, and visiting with Rudy. "Fred" Ramstad, member of the museum's Board of Directors, presented Rudy a plaque honoring him for his lifetime of service in the field of mineralogy. She also read a letter of appreciation from Sharleen Harvey, Rice Museum Co-Founder.

"I first met Rudy Tschernich on a roadside covered with basalt boulders filled with zeolites near Goble, Oregon. He was just a college age kid then, with a passion for zeolites. It was a weekend outing with my parents, my husband and kids, Rudy and John Cowles with his microscope. We had a great time and found some neat specimens. It was the first outing of many, many, over the years with these same folks and dozens of others. Rudy and John Cowles, together, generated unending enthusiasm for field collecting in the Northwest and also for the identification, care and preparation of the specimens collected.

When the Friends of Mineralogy came to the Pacific Northwest, Rudy was among the small group that formed the Pacific Northwest Chapter and was best known for his pickup's license plate "ZEOLITE". I don't know where that license plate is now. I seem to remember that it was sold at one of the Friends of Mineralogy symposium auctions.

At the time the Rices were making decisions about the future of their collection and their desire to keep the collection intact, Rudy was the first to write them a letter, encouraging them to form a museum where all of the mineral collectors in the Pacific Northwest could participate and enjoy. That letter had a profound influence on my parent's decision to found the Rice Museum.

Photos by John Lindell

After the Rices passed away, I was left with the job of caring for the collection. Within a couple of years, I began having difficulty with my sight and hearing and my husband wanted to take his arthritis to Arizona for the winters. It was time for me to find someone else to care for the collections. Because of his passion for the minerals, the museum, the profession, and the hobby, I knew Rudy would be my first choice. I asked him if he would be interested. He told me that he would be retiring from the Post Office in a couple of years and after that, would like to have the job. Rudy brought his tremendous knowledge and skills to the museum. His generosity, many talents, and perseverance literally produced the Northwest Minerals Gallery, so named upon his insistence, to let the world know what wonderful mineral specimens are found in the Pacific Northwest. The Rice Museum and all of its visitors will forever be grateful and proud that the Rice Museum houses the Rudy Tschnerich collection of Zeolites."

Sharleen Harvey, Co-Founder

Rice NW Museum of Rocks and Minerals

Seattle Mineral Market #4, May 21, 2011

By Bob Meyer


Attendees enjoying the Seattle Mineral Market # 4

Another Seattle Mineral Market has come and gone, the fourth, and this one brought a full cadre of dealers, with all available spaces filled. Attendance was also brisk, and dealers reported mixed results as to their level of sales. Despite competition this year from the West Coast Mineral Show in Southern California and the NCMA meeting, both held on the same weekend, the Seattle Mineral Market seems to be gaining traction, and attendees and dealers came from across the United States and Canada to attend the show.

The show was significant from the standpoint of PNWFM as well. I would estimate that about 30 percent of our members were able to make it to the show, and we had our general business meeting in the afternoon for the second year in a row.

As is usual, there were some interesting tidbits relating to the Mineral Market. For one, the alternative, but incorrect, nickname for the show, "Mineral Mart," seems to have just about pushed out the actual name of the show as far as common usage goes. This is particularly objectionable to show organizer Bart Cannon, possibly because "Mart" rhymes with "Bart." Speaking of Bart, he again supplied us with interesting conversational subject matter. Despite his "getting into shape" by rising in the a.m. for a week or two before the show, he was actually rather scarce during both the evening set up and at the actual show. In fairness, he was not feeling well. Then, in a unfortunate turn of events, one of our dealers from Canada, who I won't name, but his initials are R.H., was unable to get his specimens through US customs and so had nothing on hand to sell, despite having two tables. Another interesting tidbit occurred when some militant square dancers showed up at about 5:00 p.m. and announced that we had to be out and cleaned up by 6:00 p.m. We made a valiant effort, as people in odd, gaudy Western shirts milled about and looked rather irritated with us. Mercifully, they were unable to get their sound system operating while at least I was there. It turned out later that they were cracked, and we actually had until 8:00 p.m. to vacate the premises. Finally, unlike the second Mineral Market where Ray Hill was the last man standing with the one tiny broom the facility has, this time I took my turn. Luckily, for your sore eyes, I was unable to capture this event with my camera, and so you are spared.

What's so Funny? John Lindell and Marcus Origlieri (foreground) exhibiting funny grins during set-up on Friday night.

Avid Mineral Collector at Work: Alex Carrington (left) sets up his minerals as Doug Carrington looks on.

Inspection Tour from the Top: Show Organizer Bart Cannon makes his rounds, as his lieutenant, Ray Hill, accompanies to see that orders are followed.

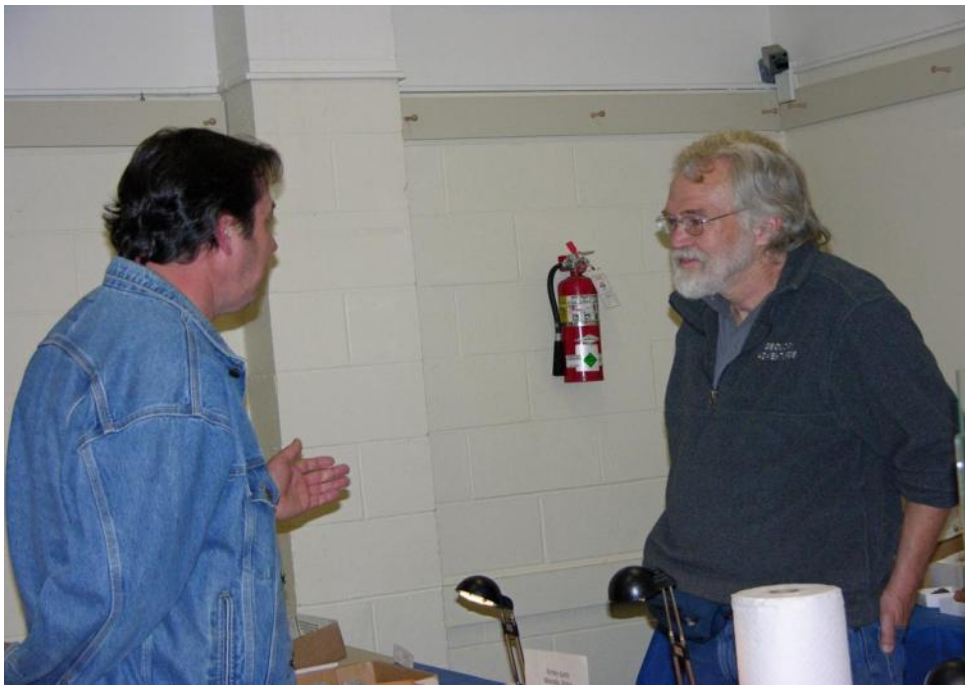
I'm Set Up, How About You? PNWFM member and Symposium floor dealer John Meek poses at his booth at a time when most of the booths were like the photo on the left.

Ray Hill (center) with Wolfgang Behrenbruch (right).

Good Friends: Art Soregaroli (left) and John Lindell

A Meeting of Old Friends: from left, Bob Boggs, Ed Godsey, Wes Gannaway, and Bob Meyer

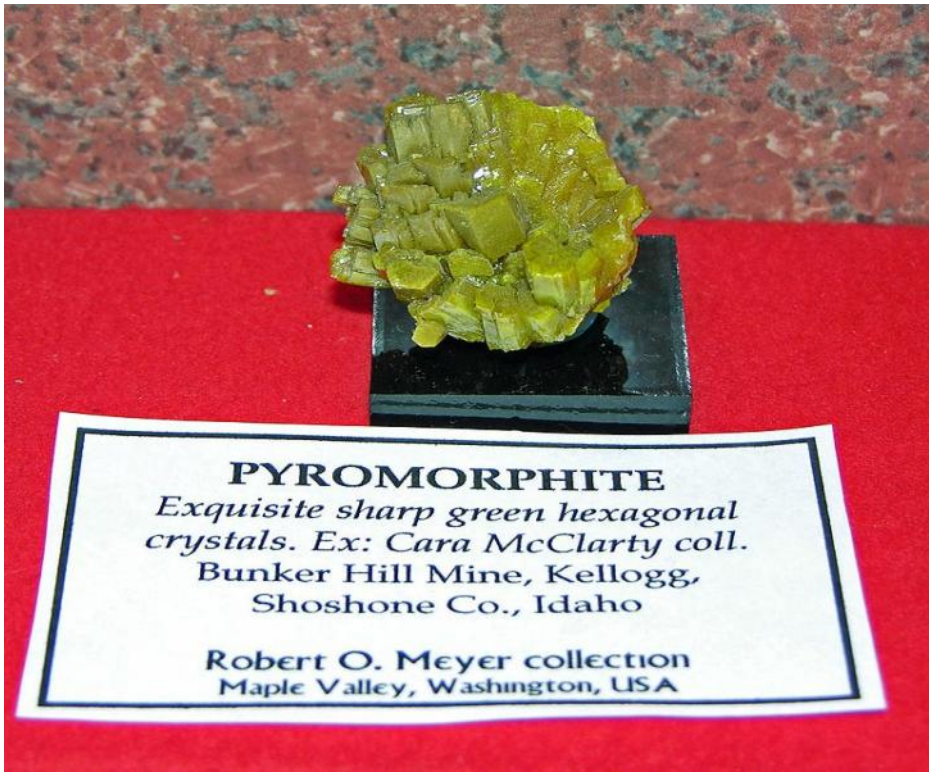
Seeing Through Mineral Colored Glass: in a take on the adage concerning roses and glass, could it be that Joe George sees better than normally when viewing past all of these minerals?



Talking "Rocks "at the Mineral Market: Bob Jackson (right) converses with a Mineral Market attendee.

Some Selected Minerals at the Mineral Market

Wendwilsonite, a rich druze of magenta crystals on a specimen 15cm across. Mineral Zone specimen.



Pyromorphite from the bunker Hill Mine, green hexagonal crystals ina group 4.5cm across. Bob Meyer specimen.

Pyromorphite, nice color zoned green crystals forming a group 10cm across from the Daoping Mine, Guangxi, China. Rob Woodside specimen.

Gold on Electrum from Round Mountain, Nevada. A well crystallized example that is 6.5cm across. Rob Woodside specimen.

Pyrite balls from Hengyang, Hunan China. The largest is about 6cm across. Scepterguy specimens.

Newly mined Multi-colored Spodumene from the Oceanview Mine, Pala, San Diego Co., California (above and below). The specimen above is about 7.5cm tall and the longest crystal below measures about 16cm long. Troy Hatch specimens.

Newly Mined Green Beryl from Conselheiro Pena, Alamores Pegmatite, Minas Gerais, Brazil. The central crystal has a slight phantom and is about 10cm across. Troy Hatch specimens.

Pyrite forming lustrous pyritohedrons on a Quartz crystal group from Spruce Ridge, King County, Washington. The specimen is about 13cm across. Bob Jackson specimen.

Lyman Museum and Mission House, Hilo, Hawaii

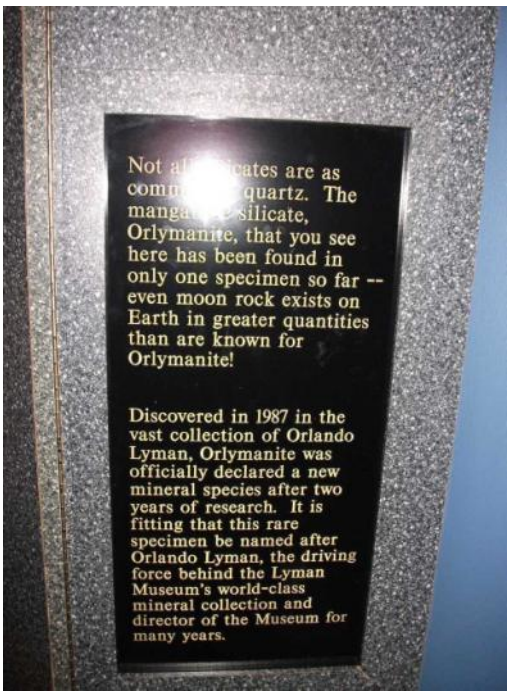
a review by Raymond Lasmanis

During May I had the pleasure to spend a week on the Big Island that included five days in Hilo. With spectacular volcanoes, sea cliffs, and incredible botanical gardens, one does not think of taking time out for indoor activities. But, nature does intervene since average rainfall for Hilo is 126"/year and driving to the top of Mauna Kea can be interrupted by a heavy snow fall. The peak with all the observatories is at 13,796' above sea level. So it was that on May 4th we were driven indoors and took the opportunity to visit the Lyman Museum.

The Lyman Museum is a great stop for viewing the natural and cultural history the Hawaii. The museum and adjacent mission house was founded by David and Sarah Lyman. It was their grandson, Orlando Lyman, who developed an interest in minerals. Over time, with selected purchasing and a keen eye, he developed a superb mineral collection that is now part of the Earth Heritage Gallery of the Lyman Museum. Orlando was the Director of the museum when Joel Bartsch got his first Curator position there.

The minerals are professionally arranged and displayed in vertical cases with excellent lighting. The minerals in each case are arranged by crystal system with a separate case in a darkened hall for fluorescent minerals. Touted in the museum web page as a world-class mineral collection, the cases certainly contain some incredible specimens including 2.5 cm. benitoite crystals on 50 cm. matrix; a beautiful wulfenite crystal group from the San Francisco mine, Sonora, Mexico; uranocircite crystals from France; a 25cm. native gold specimen from California's Eagle's Nest Mine; and even two very outstanding pyromorphite crystal groups from the Bunker Hill Mine in Idaho. Part of the display material does fall short of "world-class". For example, the hexagonal case was short on museum quality quartz and in the isometric case, octahedral fluorite was represented by a cleaved octahedron, not a natural crystals.

A single case is devoted to one specimen of orlymanite from South Africa with an explanatory sign that states that only one specimen has been found and that "even moon rock exists on Earth in greater quantities". The story of orlymanite is interesting. As a Curator, Joel Bartsch first thought it may be a new mineral and sent the specimen to Pete Dunn. Pete split the specimen, returning one half to the Lyman Museum where it now resides in the display case. After two years of research, it was identified as a new mineral in 1987. From one specimen it now appears that it is quite common in the manganese mines near Kuruman, South Africa. Joel Bartsch (personal communication, 2006) wrote that "there is probably a lot more of it around but in all likelihood it is almost wholly overlooked by the vast majority of collectors because it is aesthetically challenged". Two flats of specimens were available in Tucson around 2004, Tony Nikischer has had material for sale, and currently Arkenstone has available incredibly beautiful red inesite crystal groups on a matrix of orlymanite. While preparing this review, a quick search found that even a small fragment of orlymanite is available for a minimum bid of $4.00 over the internet.



If you are in Hilo, Hawaii, I highly recommend a visit to the modern Lyman Museum and Mission House.

R.L.
5/19/2011

The Micro Mineral Collector

By Bob Meyer

Dramatic, sharply crystallized copper from the Ray Mine, Pinal County, Arizona. Note the very sharp octahedron just to the bottom-left of the main branch. From the Linda V. Smith collection, a gift to her as a child from her relatives who worked at the mine.

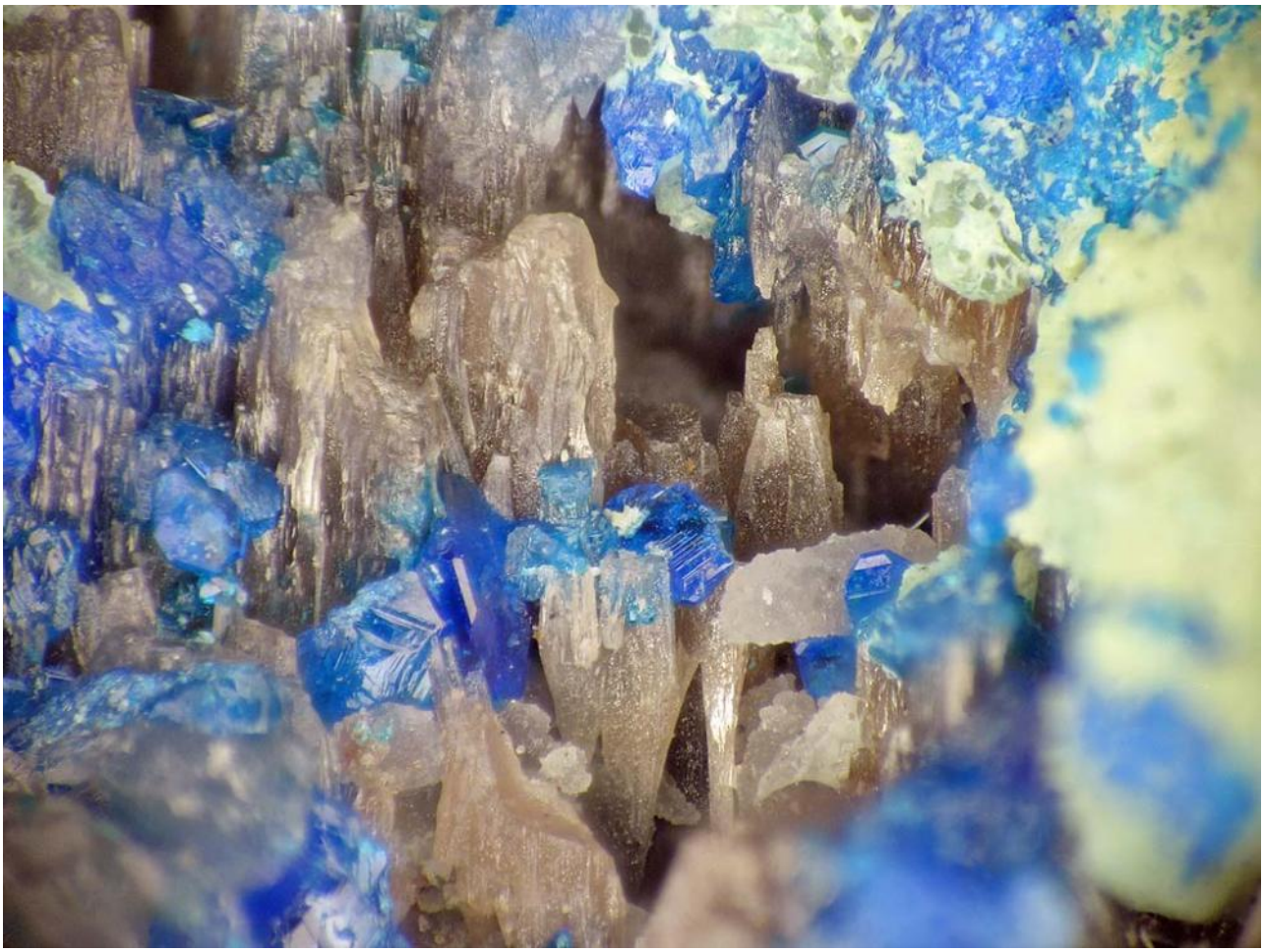
Buy and Use a Good Microscope—*adopted from Neal Yedlin*

Join a local micro mineral cabal. As you progress as a micro mineral collector, you will typically meet other micro mineral collectors who enjoy given mineral localities, especially those that are geographically close to where you live. While those who field collect macro specimens often form a bond of common interest in localities, in my experience, the default condition of such groups is often one of rivalry and self-interest. In contrast, micro mineral collectors tend to be cooperative, are typically generous with the fruits of their field collecting activities, and will join to form ad-hoc interest groups for localities. Such groups are capable of achieving synergies. Micro mineral groups such as I mention have promoted the description of a myriad of new species, and have undertaken huge undertakings to understand and describe the mineralogy of complex deposits, most notably Mont Sainte-Hilaire.

Such cabals are alive in the Northwest. Examples of the work of such groups in the Northwest are not hard to find. They would include work on Van Silver, Washington Pass, Lemolo Lake, Summit Rock, Goble, the Black Pine mine, and the Owyhee Dam to mention a few. Work continues at some of these localities and at many others.

A good example of such a group is found among the micro mineral collectors of Arizona. This group is extremely active and is finding and bringing new species to the attention of researchers, making new additions to the list of species from Arizona, and they are making new additions to the list of species from given locales. Since the topic of the Tucson Gem and Mineral Show in 2012 will the minerals of Arizona, and because of a recent influx of Arizona specimens into my collection, the subject of the pictorial in this installment of ***The Micro Mineral Collector*** will feature minerals from that state. Joe A. Ruiz, of Mammoth, Arizona, collected some of the specimens depicted and I would like to express my gratitude to him.

The Minerals of the Mammoth-St. Anthony Mine, Tiger, Pinal County, Arizona



Phosgenite, as tan-cream colored spire shaped crystals with deep blue plates of Diaboleite, from Tiger. A classic pairing from a classic locale. Specimens such as this are revered worldwide, especially in Arizona. The Mammoth-St. Anthony Mine, which ceased production in 1953, is considered by many to be the greatest of all mineral locales for its combination of display specimens and its extremely rare species. A 4 mm wide view from a cabinet specimen obtained this year at the Tucson show.

A geochemical theory of mineral formation at Tiger was postulated by mineralogist Richard A. Bideaux in his 1980 article on the locale in the Mineralogical Record. The Mammoth-St. Anthony Mine is worthy of renown as a specimen producer due to its famous assemblages of red wulfenite with green dioptase; not to mention its very fine specimens of cerussite; perhaps the world's finest and largest crystals of linarite; extremely fine leadhillite specimens, (possibly the world's best); world class specimens of azurite, malachite, and vanadinite; and Tiger was a producer of wulfenite specimens that certainly rank among the top five localities in terms of quality. In addition to these species, which Bideaux attributed to a *normal oxidized sequence,* Tiger was blessed with a very unusual assemblage of rare species that were rich in volatile halogen elements such as chlorine and fluorine.

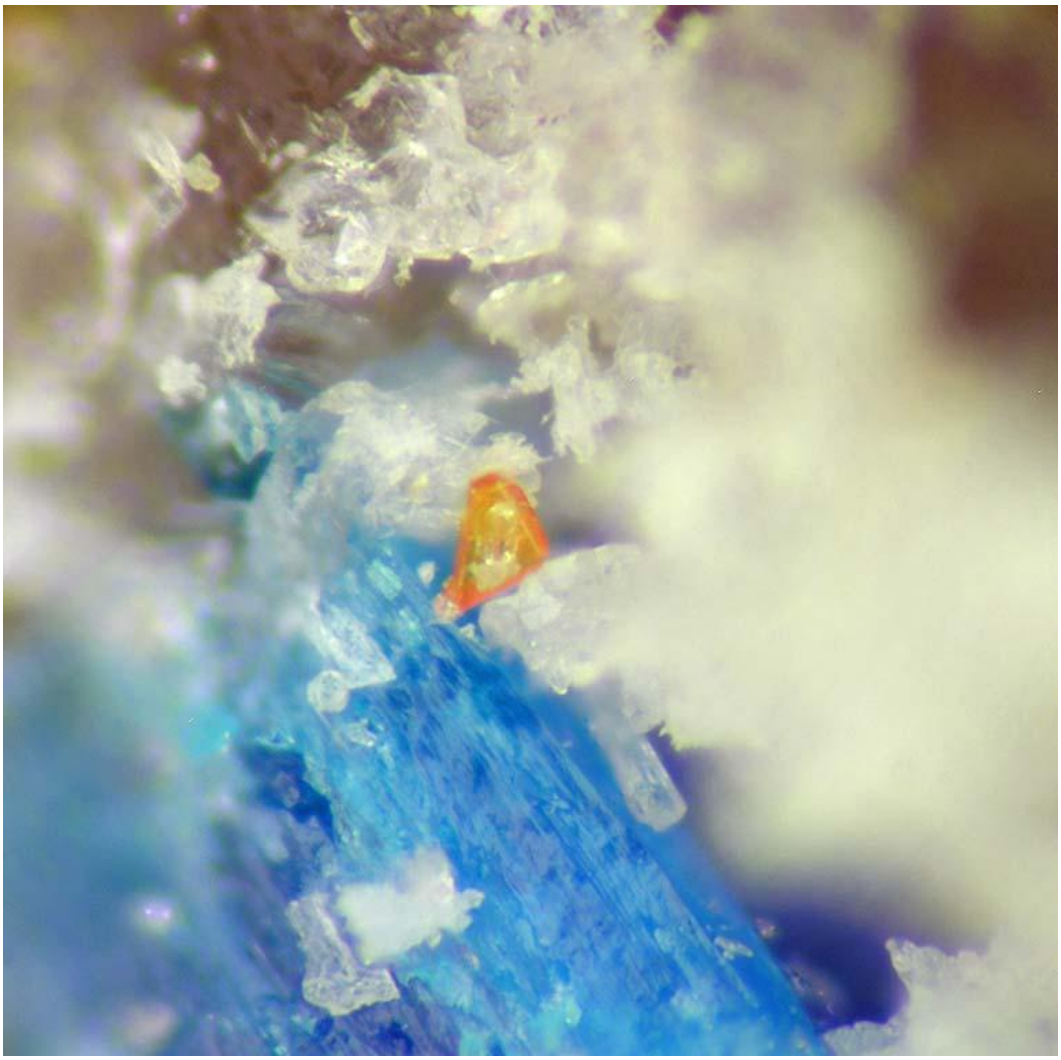
Bideaux called this latter group the *anomalous oxidized sequence.* While some of these species are known from elsewhere, nowhere are they found in specimens of such richness or abundance as they are at Tiger. Typically, these species might form in an oxidation sequence, but because of the volatility of their composition, they do not persist, especially in large quantities. Based on observations of hundreds of such specimens, Bideaux postulated that such species at Tiger were formed in a closed system, as such specimens are typically bounded by rinds of very dense and impermeable silica-infused chrysocolla-wherryite, which is in turn surrounded by an incredibly tough altered quartz monzonite.

Yedlinite, a violet colored doubly terminated crystal on Quartz from the Mammoth-St. Anthony mine. Yedlinite, a species named for and discovered by the famed micro mineral collector, Neal Yedlin, is an extremely rare species, and Tiger is the type and only locale. The species is one of the "trinity" of the most desirable species from Tiger, and Yedlinite could be said to be at the head of that list, thus possibly making it the most desirable of all micro mineral species. The field of view of this image is 1.5 mm. Ex: Neal Yedlin collection. Obtained in June 2011.

My own observation and careful microscopic examination of over one hundred specimens from this group finds no fault with Bideaux's theory. Such species apparently formed in pods within the mine, at times in direct proximity with areas of the mine that produced specimens of the more traditional specimens, such as the wulfenite-cerussite-dioptase-cuprian "allophane"-fornacite assemblage. Subsequent work on similar localities, such as the Torr Works (Merehead) Quarry near Somerset, England (Turner, 2006), and recent collecting of similar anomalous oxidized species at the Rowley Mine in Arizona have strengthened the case for the formation of the anomalous oxidized species in a closed system.

Bideaux included Yedlinite in the anomalous group, ostensibly because it contains chlorine and is found in association with diaboleite, the most emblematic of the anomalous group species.

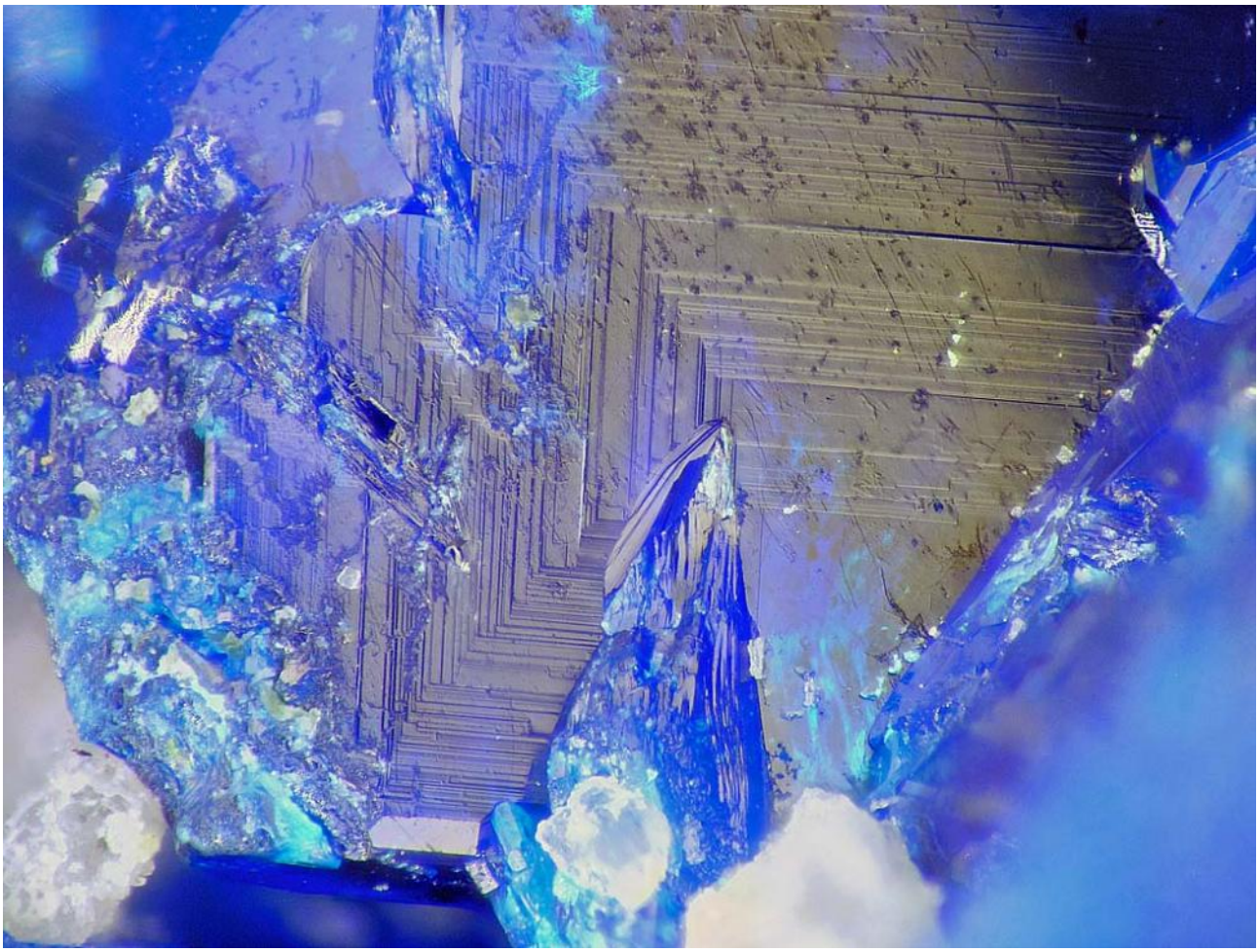
Despite this, I do not think it fits well within that group. In addition to its association with diaboleite, yedlinite is often found in association with wulfenite and dioptase. Additionally, Yedlinite contains the element chromium, which is not available elsewhere in the anomalous group species at Tiger. The most ready source of chromium at Tiger would come from fornacite, which occurs, not in the anomalous group paragenesis, but in the wulfenite-dioptase assemblage, a part of the normal oxidized sequence. I offer an alternative geochemical theory for the formation of the yedlinite sequence and a related sequence, dubbed the pinalite assemblage, which stems from the idea of a *partially* closed system. It starts with one of the anomalous group pods, but in this case not completely bounded by the chrysocolla/monzonite. Instead, the pod would be partially bordered by sugary quartz, which is impermeable, but not as impermeable as the chrysocolla-monzonite. My theory is that in probably just one instance at Tiger, an anomalous pod partially ruptured into an area with sugary quartz, minor wulfenite, dioptase, and fornacite. This created a border phase between the anomalous and oxidized sequences. The chlorine from the diaboleite could then react with the chromium from the fornacite to form yedlinite. Specimens of yedlinite occur in sugary quartz rock and have minor amounts of diaboleite and wulfenite. This association of diaboleite and wulfenite is extremely rare at Tiger, but is symptomatic Yedlinite specimens.



Georgerobinsonite, a tiny orange crystal of this brand-new species from Tiger (IMA2009-68) approved in February, with deep blue Diaboleite. This species is a lead chromate hydroxide chloride fluoride, (Mindat, 2011), somewhat related to Yedlinite, and certainly as rare. It forms in the "Pinalite Assemblage," which, like Yedlinite, argues for a border phase between the anomalous and normal oxidized sequence at Tiger. FOV=0.6 mm.

In another related event, or events, pod(s) ruptured into other areas of vuggy sugary quartz and produced the species characterized by a suite dubbed the Pinalite assemblage. This is another probable border phase.

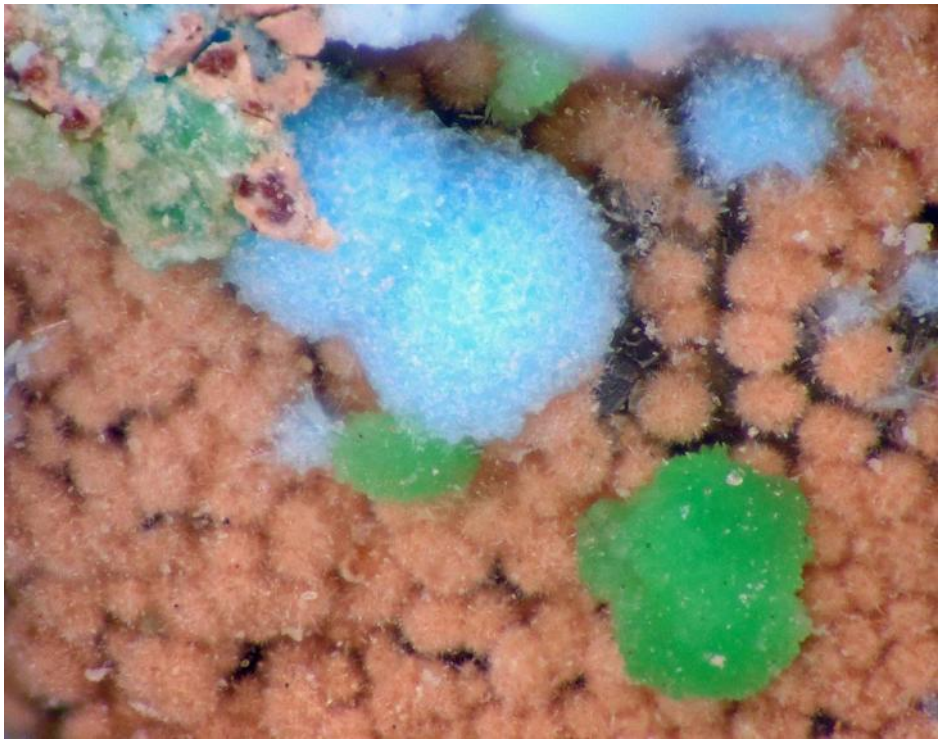
This assemblage includes pinalite, sparsely scattered crystals of diaboleite, yellow leadhillite, green caledonite, matlockite, the new species georgerobinsonite, and other undescribed species. This assemblage is currently under study by a number of Tiger mineral enthusiasts, and at least one species from this occurrence is currently in the process of being described as a new mineral species.



Diaboleite, from the Mammoth-St. Anthony Mine, a bright blue crystal face displaying dramatic growth features under oblique illumination. Tiger is, by far, the world's best locality for this rare species. The FOV is 3.2 mm.

Minerals of the Christmas Mine, Dripping Springs Mtns, Gila County, Arizona

Another Arizona locality well known to collectors is the Christmas Mine. Most collectors are familiar with specimens of vivid blue kinoite and the plentiful specimens of green dioptase from the Christmas Mine. In addition to these commonly seen species, the Christmas Mine is the home of an unusual suite of rare species, which are predominantly microcrystalline. The suite includes such species as stringhamite, whelanite, and xonotlite, and includes four additional species for which the Christmas Mine is the type locality (Mindat, 2011). All four species are depicted below in photographs and these species are significant in that all four were first recognized and brought to the attention of scientists by micro mineral collectors from Arizona. The species ruizite and junitoite were discovered by Arizona collectors Joe A. Ruiz and Robert A. Jenkins (Williams, 1976) (Williams, 1977). Apachite was first discovered by Robert A. Jenkins, while Joe A. Ruiz and then mine geologist Dave Cook led the field trip where Giliate was discovered (Cesbron, 1980).



Apachite, as pale blue balls with a fuzzy exterior, with green crystals forming balls of Gilaite, (pronounced Hee-la-ite, like "Gila monster" and "Gila County"), and orange-brown sprays of Ruizite. Here, we have three of the four species for which the Christmas Mine is the type locale. True Apachite is the rarest species of the three, and much that has been labeled as being that species is not Apachite. Analyzed material. FOV=3.2 mm.

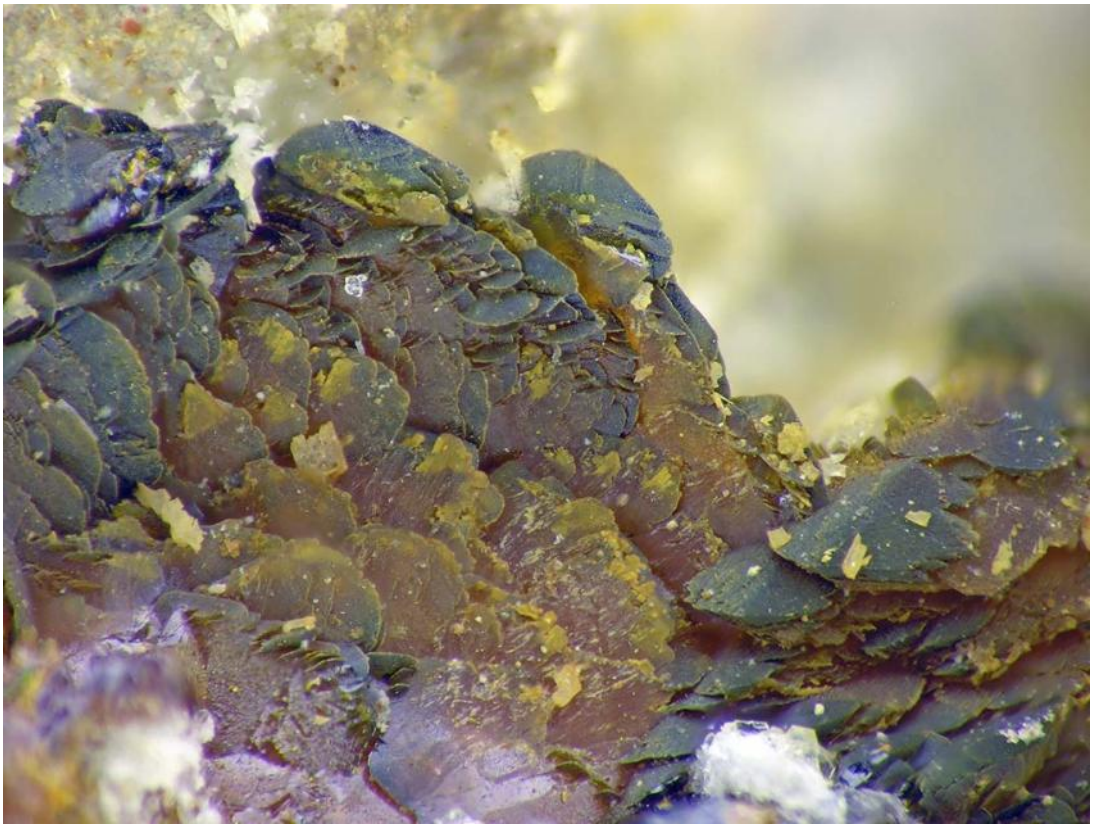
Junitoite, an extremely rare freestanding crystal from the Christmas Mine. The Christmas Mine is the type locale. The mineral is pronounced "June-eat-oh-ite" and does not have the Spanish "J" sound that one might be more familiar with from the Southwest. It is named for Dr. Jun Ito. FOV=1.8 mm.

Minerals from the Evening Star Mine (and nearby), Tiger Wash, Maricopa Co., Arizona

The Evening Star Mine not as well known by the collecting community as a whole, but has been receiving attention, especially over the past few years, from the micro mineral community in Arizona. Because of those efforts, some species that are new to the locale have recently been added, and an unnamed prospect nearby has yielded a new mineral species, Rongibbsite, which is a lead aluminum silicate (Mindat, 2011c). All the specimens in this section were collected by Arizona collector Joe A. Ruiz, and were gifts from him. I wish to express thanks to Joe for these specimens.

Fornacite, a superb dark green 1.5 mm crystal with Quartz (foreground) and white hexagonal platelets of Wickenburgite. This is a species that seems to be common from the Evening Star, and this is a great example of the species. Collected by Joe A. Ruiz of Mammoth, Arizona.

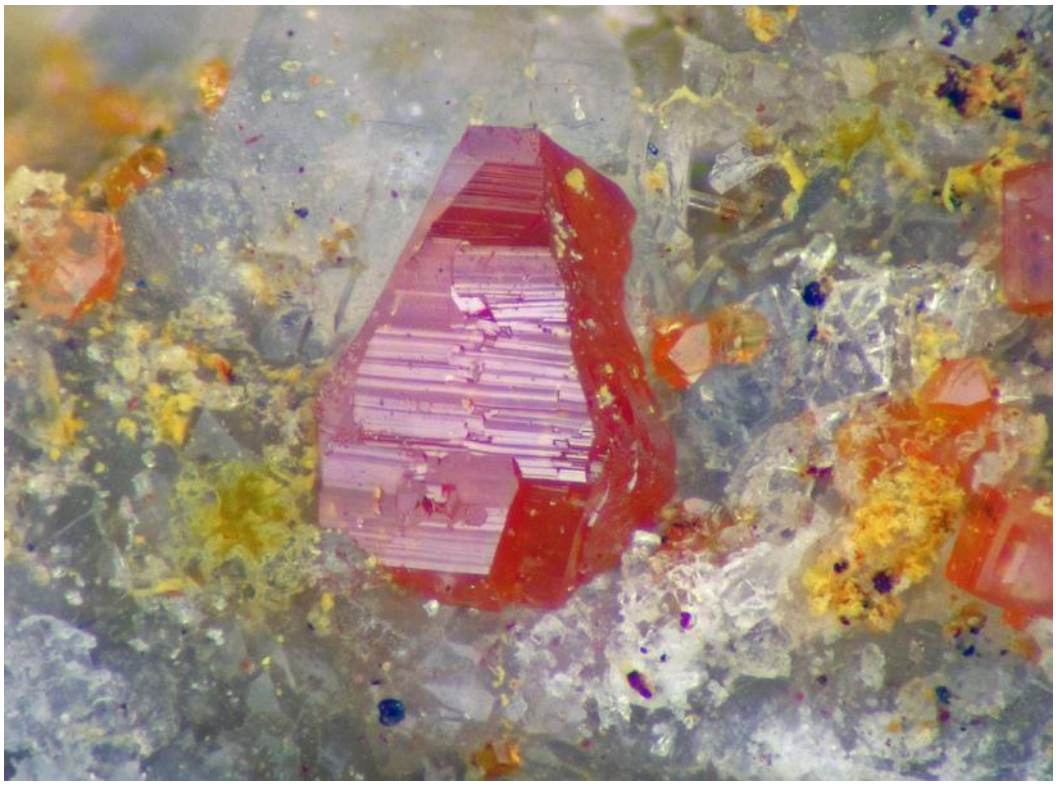
Hedyphane, as orange aggregates that appear to be pseudomorphous after an unknown mineral, with white hexagonal platelets of Wickenburgite. Collected by Joe A. Ruiz. FOV=2.3 mm.



Iranite (orange) replacing Fornacite, from the Evening Star Mine. FOV=4.1 mm. Collected by Joe A. Ruiz.

Rongibbsite, two images (top and bottom) of this new species, just approved in late 2010 (Mindat, 2011b). Note the odd branching habit of this species. This material was collected in an unnamed prospect near the Evening Star Mine by Joe A. Ruiz. The FOV above = 1.8 mm, and below = 1.0 mm.

Other Arizona Micro Minerals



Brackebuschite, two images (top and bottom), of superb orange crystals from the C&B Mine, near Christmas, Dripping Springs Mtns, Gila County Arizona. The Brackebuschite from the C&B is a recent discovery, dating back a little less than a year. Specimens collected by Joe A. Ruiz. Crystal length above = 0.3 mm, FOV below=1.2 mm.

Cumengeite, an interesting, complex blue crystal from the Rowley Mine. Part of a one-time find by Arizona collector Michael Cline. This occurrence was Arizona's first discovery of cumengeite. The FOV is 1.1 mm.

Conichalcite, superbly formed green crystals on Quartz from the Copper Creek area of the Galiuro Mountains, Pinal County, Arizona. The field of view is 2 mm. Collected by Joe A. Ruiz.

Micro Mineral collectors Joe A. Ruiz (on left) and Linda V. Smith (on right), taken in February 2011. Many thanks to Joe Ruiz for many of the specimens depicted in the photographs in this article.

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The Pacific Northwest Chapter of the Friends of Mineralogy

37th Annual Show and Symposium

October 14-16, 2011
Red Lion Inn, Kelso, Washington

Famous Mineral Localities of Mexico

Featured Speakers

Dr. Terry Wallace
"The Guanajuato District"
"The Fresnillo District"

Dr. Peter Megaw
"The Santa Eulalia District"
"The Milpillas Mine"

Tom Moore
"The Ojuela Mine I and II"

Main Floor Dealers

EARTH'S TREASURES: Richard Kennedy
LEHIGH MINERALS: Jim and Yolanda McEwen
PACIFIC RIM MINERALS: John Meek
Others to be determined

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Free Admission to the Mineral Show and Dealers

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37th ANNUAL SYMPOSIUM, MINERALS OF MEXICO

Work continues on the 37th annual Symposium to be held this October. The speaker program is set and appears below.

There is still room on the main floor for a fourth major dealer. Anyone interested in filling this space should contact Al Liebetrau at liebetrauam@msn.com. Potential room dealers should also contact Al. Room dealers must be registered for the symposium, pay a $15 dealer fee, and donate a specimen to the Saturday night auction.

Anyone interested in putting a mineral display in one of the main floor cases should contact Ray Lasmanis at ray.lasmanis@dnr.wa.gov.

Start putting aside a special donation for the Saturday evening auction.

Symposium registration information will be included in the next newsletter in September and in a separate e-mailing to chapter members. For those interested in registering earlier contact Bill Dameron at barite-bill@comcast.net.

Room reservations should be made directly with the Red Lion Inn, 360-636-4400.

Friends of Mineralogy - Pacific Northwest Chapter
2011 Symposium
Famous Mineral Localities of Mexico
Speaker Schedule

Saturday, October 15

Morning Session:
Dr. Peter Megaw: What's New in Mexican Minerals
Dr. Terry Wallace: The Guanajuato District

Afternoon Session:
Dr. Peter Megaw: The Santa Eulalia District
Dr. Terry Wallace: The Fresnillo District

Sunday, October 16

Morning Session:
Tom Moore: The Ojuela Mine – Part 1
Tom Moore: The Ojuela Mine – Part 2

Dr. Terry Wallace, Jr. is the Principal Associate Director of Science, Technology, and Engineering at Los Alamos National Laboratory where he directs more than 4,600 scientists and technologists that work to support the Laboratory's nuclear deterrent, threat reduction and energy security missions. From 1983 to 2003, Dr. Wallace was a Professor of Geosciences at the University of Arizona, and also served as the curator of the University of Arizona Mineral Museum. Dr. Wallace's collecting interests are broad, but he specializes in silver minerals. He has written extensively on worldwide silver mineral localities and the mining history and mineralogy of Arizona, and was the recipient of the 2002 Carnegie Mineralogical Award.

Thomas Moore is the Associate Editor of the Mineralogical Record, a position he has held since 2001. His affiliation with the magazine began much earlier, however, with his show reports from Europe in 1986. Mr. Moore was raised in southeastern Pennsylvania, where as a child he developed a keen interest in minerals that continues to this day. He graduated from the University of Delaware with degrees in English and Geology, and later earned an M.F.A degree from Cornell University. He has taught English courses in Europe and in the U.S. and, since joining the Record, has written numerous show reports, book reviews, and locality articles, including most of the expanded special issue on the Ojuela mine published in September-October 2003.

Dr. Peter Megaw is a Consulting Geologist, President of IMDEX/Cascabel and co-founder of Minera Cascabel. Dr. Megaw has been involved in Mexican geology and the Mexican mining industry for 30 years, and he and his team are credited with the discovery of several new deposits. His Ph.D. work at the University of Arizona focused on the Santa Eulalia Ag-Pb-Zn District in Chihuahua and, in the course of this study, he developed a passionate interest in mineral collecting. Dr. Megaw now focuses almost exclusively on the minerals of Mexico. He has exhibited his minerals competitively, and has been awarded the Desautels and Romero trophies. He has also authored many mineralogical articles, and was presented with the 2009 Carnegie Mineralogical Award.

Photos by Linda Smith

PACIFIC NORTHWEST
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lindell4@aol.com

PNWFM CALENDAR

Everett Rock and Gem Club Rock-hound Estate Sale
tons of lapidary rough, slices, and equipment.
510 11th Street Mukilteo, WA
July 23, 24, 9am to 4pm.

Rice Museum Summer Festival
August 6, 9am to 6pm; August 7, 9am to 4pm

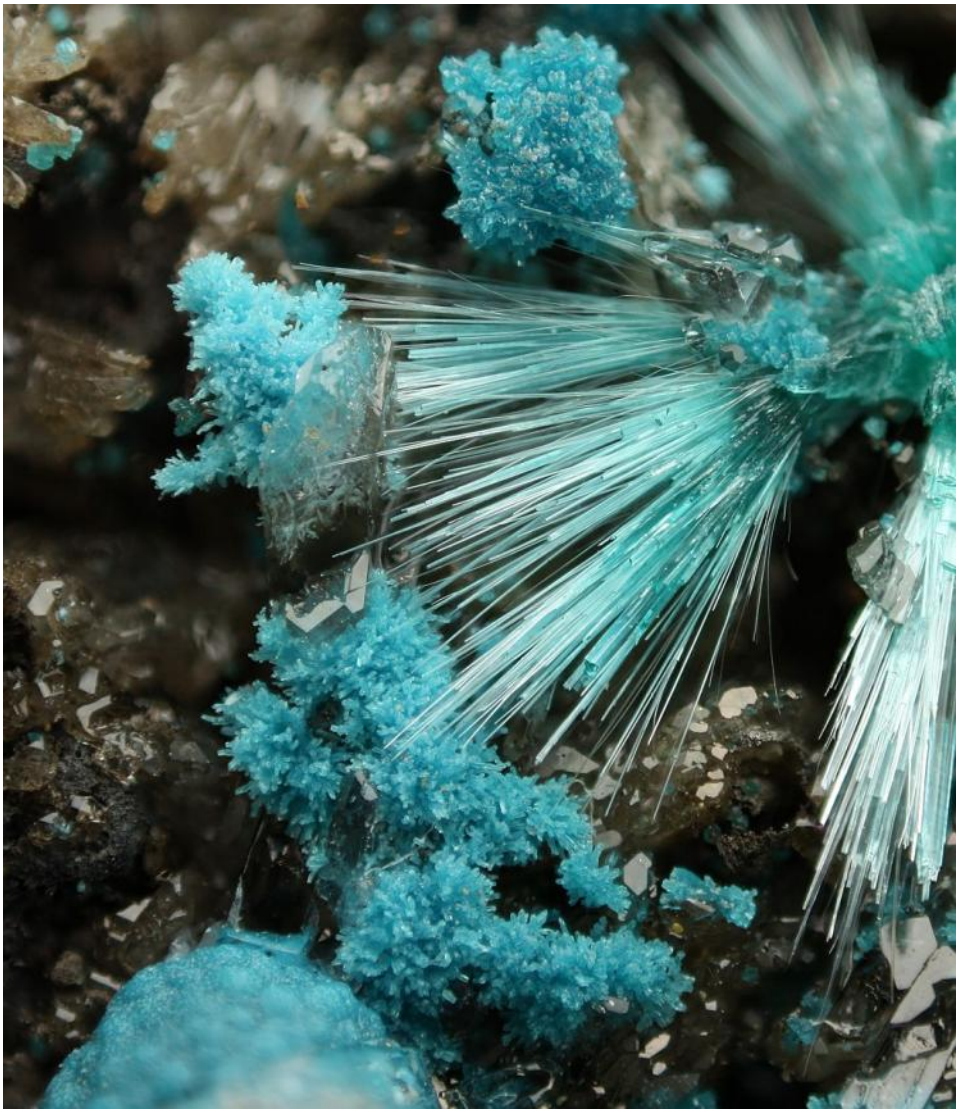
Rice Museum Fossil Festival -
August 13, 9am to 4pm

Denver Mineral Show and Friends of Mineralogy National Board Meeting
September 16-18

PNWFM Washington Pass Cleanup
August 12-14

PNWFM Symposium

Minerals of Mexico
October 14-16th



Aurichalcite, chrysocolla, 79 Mine, Arizona. Photo by Frank De Wit